

REMARKS

Claims 1, 3, 4, 7-18, 21-28, and 32-58 are pending in the application. Claims 2, 5, 6, 20, 29, 30, and 31 have been canceled by the above amendments. Applicants have amended claims 1, 3, 7, 21, 23, 25, 27, 32, 40, 43 for the reasons set forth below. Applicants have amended paragraph [0120] to explicitly recite subject matter that was recited in the provisional application that was incorporated into the subject application by reference at the time of filing.

The Examiner has rejected claims 1-6, 20, 29-31, 40-47, and 50-53. Applicants note with appreciation the Examiner's indication of allowable subject matter in claims 7-18, 21-28, 32-39, 48, 49, and 54-58.

CLAIM OBJECTIONS

The Examiner has objected to claim 2 "because it fails to further limit claim 1." Applicants have canceled claim 2 as requested by the Examiner, rendering the objection moot. The Examiner has objected to claim 3 "because in line 8, 'along side' should be 'along said'." Applicants have amended claim 3 to delete the term "along side", thus overcoming the objection. Accordingly, Applicants respectfully request that the Examiner withdraw the objections to claims 2 and 3.

REJECTIONS UNDER 35 U.S.C. 112

The Examiner rejected claims 50 and 51 under 35 U.S.C. 112, first paragraph, "as failing to comply with the written description requirement," finding that the "claims contain subject matter which was not described in the specification..." In particular, the Examiner indicated that "[c]laim 50 recites that the waveguide holding members each have at least one protrusion. There does not appear to be any support for this location."

Applicants respectfully direct the Examiner's attention to the last sentence of sheet 3 of the provisional application from which priority is claimed, in which it is stated that: "Alternatively, the fiber-rails are bonded to the movable array so that the movable array moves by sliding the fibers on the substrate." Applicants have amended paragraph [0120] above to include the subject matter of the quoted sentence of the provisional application.

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Since the entire disclosure of the provisional application was incorporated into the subject application by reference at the time of filing, the above amendment of paragraph [0120] does not introduce new matter.

A movable array is an example of a “waveguide holding member”; a fiber bonded thereto is an example of a “protrusion”; and, a substrate is an example of a “mounting structure”. Hence, paragraph [0120] as amended provides support for claim 50 which recites that “the waveguide holding members each comprise at least one protrusion and the mounting structure comprises a groove engaged with the protrusions.” For at least these reasons, Applicants believe that the rejection to claim 50 is overcome and respectfully request that the Examiner withdraw the rejection of claim 50. Likewise, since claim 51 was only rejected for its dependence from claim 50, Applicants respectfully request that the Examiner withdraw the rejection of claim 51.

The Examiner rejected claims 40-42 under 35 U.S.C. 112, second paragraph, “as being indefinite for failing to particularly point out an distinctly claim the subject matter which applicant regards as the invention,” because “[c]laim 40 refers to ‘said substrate’ but depends from claims 30 and 31, neither of which mentions a substrate.... This rejection may be overcome by changing claim 40 to depend from claim 32.” Applicants have amended claim 40 to depend from claim 32. Therefore, Applicants respectfully request that the Examiner withdraw the rejections of claim 40, as well as claims 41 and 42 which were rejected solely based on their dependence from claim 40.

REJECTIONS UNDER 35 U.S.C. 102

The Examiner rejected claims 43-47 and 52-53 under 35 U.S.C. 102(b) as being anticipated by US Patent 5,390,266 to Heitmann et al.. The Examiner stated that “Heitmann discloses in optical switch assembly (fig. 1) comprising a first waveguide holding member 34 holding a first optical waveguide 20...; a second waveguide holding member 40 holding a second optical waveguide 22...; and a base 28 having a mounting structure (i.e. its upper surface, or the groove located therein) onto which the first and second holding members are disposed...”. (Emphasis Added.) Applicants respectfully disagree with the Examiner’s interpretation and application of Heitmann.

Applicants have effected a non-narrowing amendment of claim 43 to recite additional aspects of Applicants' invention. Independent claim 43 now recites "a base comprising a mounting structure movably attached to the first and second waveguide holding members...". In contrast, Heitmann discloses a device comprising a support 28 having a V-groove in which first and second fiber end sections 20, 22 are disposed. (Fig. 1; column 6, lines 58-61.) Heitmann further discloses that the device comprises a U-shaped support 32 having a "leg 34 [that] rests on the first end section 20... [and] a further leg 40 for attachment in the area of the second end section [22]." (Column 7, lines 5-6 and lines 23-24. Emphasis Added.) Thus, the legs 34, 40 of the U-shaped support 32 are disclosed as being disposed on end section 20 and in attachment in the area of end section 22, NOT on the support 28. The only structures disclosed as being disposed on the support 28 are the first and second fiber end sections 20, 22, not the U-shaped support 32. Therefore, Heitmann fails to disclose at least Applicants' claimed feature of "a base comprising a mounting structure movably attached to the first and second waveguide holding members..." as recited in independent claim 43. (Emphasis Added.) Thus, Heitmann fails to disclose each and every element of claim 43. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 43, as well as claims 45-47, 52, and 53 which depend from claim 43, respectively.

The Examiner has rejected claims 1-6, 20, and 29-31 under 35 U.S.C. 102(b) as being anticipated by US Patent 4,973,127 to Cannon et al. The Examiner states that "Cannon discloses an optical switch assembly (figs. 1-3) comprising a fixed optical array 25; a movable array 25'; a plurality of first optical fibers f1-f12 mounted on the fixed array and a plurality of second fibers f1'-f12' mounted on the movable array; and a mounting apparatus comprising a plurality of mounting structures 45/45'."

Applicants have amended claim 1 to recite that "said movable optical array is movable ...to an open switch position on the mounting apparatus wherein light transmitted from a selected one of said second optical fibers is deflected so that the deflected light is not received by said first fibers." In contrast to Applicants' claimed invention, Cannon does not disclose a switch, Cannon discloses an optical coupler in which fibers are disposed end-to-end with their respective optical axes aligned so that light from a fiber in a first half of the connector is

received by a fiber in the second half of the connector. When the two plugs 25, 25' are completely detached the plugs are not engaged with the pins 45, 45' (which the Examiner finds to be a "mounting apparatus"). Hence, Cannon does not disclose Applicants' recited feature of "an open switch position on the mounting apparatus...". (Emphasis Added.) In addition, if the two plugs 25, 25' were mutually engaged on the pins 45, 45' but spaced apart, light emitted from fibers in one plug 25 would be directed to one or more fibers in the second plug 25', because the fibers are disclosed as having planar endfaces perpendicular to the fiber axis. (See Figs. 5 and 6). Consequently, light exiting a fiber in the first plug 25 is aimed at and received by fiber(s) in the second plug 25' when the plugs 25, 25' mounted on the pins 45, 45' but spaced apart. Thus, Cannon does not disclose Applicants' recited feature of "an open switch position on the mounting apparatus wherein light transmitted from a selected one of said second optical fibers is deflected so that the deflected light is not received by any of said first fibers." For at least these reasons, Cannon fails to disclose each and every feature recited in claim 1. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 1, as well as claims 3 and 4 which depend therefrom.

Regarding the rejection of claims 2, 5, 6, 20 and 29-31 Applicants have canceled such claims rendering the rejection of such claims moot.

ALLOWABLE SUBJECT MATTER

The Examiner is indicated that claims 7-18, 21-28, 32-39, 48, 49, and 54-58 contain allowable subject matter.

Applicants have amended claim 7 to incorporate the subject of base claim 5 and intervening claim 6. Consequently, Applicants have canceled claims 5 and 6. Since the Examiner has indicated that claim 7 would be allowable if rewritten in independent form to include the subject matter of the base claim 5 and intervening claim 6, Applicants understand that amended claim 7 is now allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 7, as well as claims 8-18 which depend therefrom.

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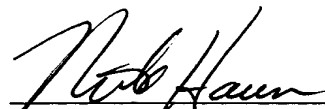
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Applicants have amended claim 21 to incorporate the subject of claim 20. Consequently, Applicants have canceled claim 20. Since the Examiner has indicated that claim 21 would be allowable if rewritten in independent form to include the subject matter of claim 20, Applicants understand that amended claim 21 is now allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 21, as well as claims 22-28 which depend therefrom.

Applicants have amended claim 32 to incorporate the subject of base claim 30 and intervening claim 31. Consequently, Applicants have canceled claims 31 and 32. Since the Examiner has indicated that claim 32 would be allowable if rewritten in independent form to include the subject matter of the base claim 30 and intervening claim 31, Applicants understand that amended claim 32 is now allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 32, as well as claims 33-42 which depend therefrom.

In view of the foregoing amendments and remarks, it is believed that the claims in this application are now in condition for allowance. Early and favorable reconsideration is respectfully requested. The Examiner is invited to telephone the undersigned in the event that a telephone interview will advance prosecution of this application.

Respectfully submitted,



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